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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,941	09/02/2003	Yuji Arai	12049-0010	1227
22902	7590	08/21/2006	EXAMINER	
CLARK & BRODY 1090 VERMONT AVENUE, NW SUITE 250 WASHINGTON, DC 20005			BOMAR, THOMAS S	
			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/651,941		ARAI ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Shane Bomar		3672	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6 and 14-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Objections*

1. Claim 6 is objected to because of the following informalities: As noted in the First Office Action, the use of the numbers and the preceding periods makes the claim confusing and improper; these numbers and preceding periods should be removed as they are unnecessary because the recitation of “following expression” with the expression immediately following is sufficient; although the recitation of “and E0 is calculated by the following expression” would need to be moved down two lines. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 6 and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's own admission.

Regarding claim 6, Applicant has admitted in Figures 2 and 3, and on pages 2 and 3, that the claimed process for embedding and expanding pipes is known to exist in the prior art, while pages 22-24 of the current specification state that a sampling of steel pipes were manufactured using a known production process, the wall thicknesses of the steel pipes were then measured to determine the non-uniform wall thickness ratios, the pipes were then subject to different percentages of expansion, and were then tested for collapse strength. In Table 2 it is shown that

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some of the pipes met the claimed E0 expression, while others did not. Therefore, it is clear that the steel pipe being claimed in claim 1 was already known to exist because it is made from a process known in the art. It is also worth noting that the claim is not directed to a steel pipe with a non-uniform wall thickness because only a ratio of the wall thickness has been presented. Therefore, if a manufacturer were to manufacture a pipe with uniform wall thickness throughout, which one would assume would be the manufacturer's ultimate goal, the uniform pipe would clearly anticipate this claim, also.

Nevertheless, the expressions used to define a non-uniform wall thickness ratio in an attempt to further limit the method of claim 6 cannot be given patentable weight. In 35 USC 101, natural phenomena are not considered patentable subject matter and would not be considered proper to be in a claim. In the current claim, the Applicant has presented a concept that defines a non-uniform wall thickness ratio which must meet a certain relationship. Uniformly made pipes are known to exist (i.e., naturally occurring) and would clearly meet the relationship presented in the claim.

Regarding claims 14-16, Table 1 shows steel pipe with the claimed compositions and, as stated above, the pipe was manufactured by a known process as per the Applicant's own admission.

*Response to Arguments*

4. Applicant's arguments filed June 9, 2006 have been fully considered but they are not persuasive. While consulting with Primary Examiners knowledgeable in the art, it was determined that the non-uniform thickness ratio relationship added to the method of claim 6 is a naturally occurring phenomenon since any known uniform thickness pipe would meet the claimed relationship. Therefore, this portion of the claim is not given patentable weight because it is directed to non-statutory subject matter. The rest of the method steps are well known in the art as a process for embedding pipe in a well, as admitted by the Applicant.

The Applicant also argues that the invention provides unexpected results not recognized by the prior art, although the Affidavit or declaration required by 37 CFR 1.132 has not been submitted.

*Conclusion*

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

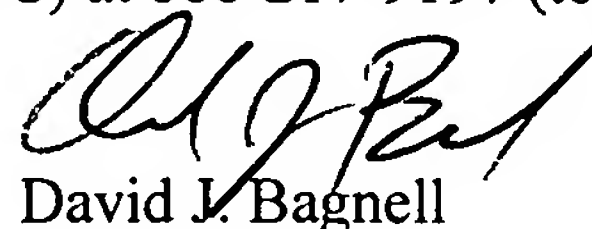
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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 571-272-7026. The examiner can normally be reached on Monday - Thursday from 6:30am to 4:00pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David J. Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

tsb   
August 15, 2006